IN THE CLAIMS:

Specific Instructions for Claim Amendments:

Please cancel Claims 1-57 and 75-81, without prejudice to or disclaimer of the subject matter therein.

Listing of Claims:

1-57. (Cancelled)

58. (Original) A therapeutic composition that, when administered to an animal, reduces IgG-mediated tissue damage, said therapeutic composition comprising an inhibitory compound that inhibits the activity of an Fcγ receptor (FcγR) protein, said inhibitory compound being identified by the method comprising:

a) providing a three dimensional structure of an FcγR protein selected from the group consisting of FcγRI, FcγRIIa, FcγRIIb, FcγRIIc and FcγRIIIb, wherein said three dimensional structure of said FcγR protein substantially conforms to atomic coordinates represented by Table 1;

b) using said three dimensional structure of said FcγR protein to design a chemical compound selected from the group consisting of a compound that inhibits binding of FcγR protein to IgG, a compound that substantially mimics the three dimensional structure of FcγR protein and a compound that inhibits binding of FcγR protein with a molecule that stimulates cellular signal transduction through an FcγR protein;

c) chemically synthesizing said chemical compound; and

d) evaluating the ability of said synthesized chemical compound to reduce IgG-mediated tissue damage.

59. (Original) The composition of Claim 58, wherein said IgG-mediated tissue damage results from a biological response selected from the group consisting of IgG-mediated hypersensitivity, IgG-mediated recruitment of inflammatory cells, and IgG-mediated release of inflammatory modulators.

60. (Original) The composition of Claim 58, wherein said structure substantially conforms with the atomic coordinates represented in Table 1.

61. (Original) The composition of Claim 58, wherein said chemical compound is selected from the group consisting of an inorganic compound and an organic compound.

62. (Original) The composition of Claim 58, wherein said chemical compound is selected from the group consisting of oligonucleotides, peptides, peptidomimetic compounds and small organic molecules.

63. (Original) The composition of Claim 58, wherein said chemical compound is selected from the group consisting of an analog of said FcγR protein, a substrate analog of said FcγR protein and a peptidomimetic compound of said FcγR protein.

64. (Original) The composition of Claim 58, wherein said composition further comprises a component selected from the group consisting of an excipient, an adjuvant, and a carrier.

65. (Original) A therapeutic composition that, when administered to an animal, enhances IgG-mediated responses, said therapeutic composition comprising a stimulatory compound that stimulates the activity of an Fcγ receptor (FcγR) protein, said stimulatory compound being identified by the method comprising:

a) providing a three dimensional structure of an FcγR protein selected from the group consisting of FcγRI, FcγRIIa, FcγRIIb, FcγRIIc and FcγRIIIb, wherein said three dimensional structure of said FcγR protein substantially conforms to atomic coordinates represented by Table 1;

b) using said three dimensional structure of said FcγR protein to design a chemical compound selected from the group consisting of a compound that stimulates binding of FcγR protein to IgG, a compound that substantially mimics the three dimensional structure of FcγR protein and a compound that stimulates binding of FcγR protein with a molecule that stimulates cellular signal transduction through an FcγR protein;

c) chemically synthesizing said chemical compound; and

d) evaluating the ability of said synthesized chemical compound to enhance IgG-mediated responses.

66. (Original) A therapeutic composition that, when administered to an animal, reduces IgE-mediated responses, said therapeutic composition comprising an inhibitory compound that

inhibits the activity of an Fcε receptor I (FcεRI) protein, said inhibitory compound being identified by the method comprising:

a) providing a three dimensional structure of an FcεRI protein, wherein said three dimensional structure of said FcεRI protein substantially conforms to the atomic coordinates selected from the group consisting of the atomic coordinates represented by Table 1, the atomic coordinates represented by Table 2, the atomic coordinates represented by Table 3, the atomic coordinates represented by Table 4 and the atomic coordinates represented by Table 5;

b) using said three dimensional structure of said FcεRI protein to design a chemical compound selected from the group consisting of a compound that inhibits binding of FcεRI protein to IgE, a compound that substantially mimics the three dimensional structure of FcεRI protein and a compound that inhibits binding of FcεRI protein with a molecule that stimulates cellular signal transduction through an FcεRI protein;

c) chemically synthesizing said chemical compound; and

d) evaluating the ability of said synthesized chemical compound to reduce IgE-mediated responses.

67. (Original) The composition of Claim 66, wherein said IgE-mediated response results from a biological response selected from the group consisting of IgE-mediated hypersensitivity, IgE-mediated recruitment of inflammatory cells, and IgE-mediated release of inflammatory modulators.

68. (Original) The composition of Claim 66, wherein said structure comprises the atomic coordinates represented in Table 3.

69. (Original) The composition of Claim 66, wherein said structure comprises the atomic coordinates represented in Table 4.

70. (Original) The composition of Claim 66, wherein said chemical compound is selected from the group consisting of an inorganic compound and an organic compound.

71. (Original) The composition of Claim 66, wherein said chemical compound is selected from the group consisting of oligonucleotides, peptides, peptidomimetic compounds and small organic molecules.

72. (Original) The composition of Claim 66, wherein said chemical compound is selected from the group consisting of an analog of said FcεR protein, a substrate analog of said FcεRI protein and a peptidomimetic compound of said FcεRI protein.

73. (Original) The composition of Claim 66, wherein said composition further comprises a component selected from the group consisting of an excipient, an adjuvant, and a carrier.

74. (Original) A therapeutic composition that, when administered to an animal, enhances IgE-mediated responses, said therapeutic composition comprising a stimulatory compound that stimulates the activity of an Fcε receptor I (FcεRI) protein, said stimulatory compound being identified by the method comprising:

a) providing a three dimensional structure of an FcεRI protein, wherein said three dimensional structure of said FcεRI protein substantially conforms to the atomic coordinates selected from the group consisting of the atomic coordinates represented by Table 1, the atomic coordinates represented by Table 2, the atomic coordinates represented by Table 3, the atomic coordinates represented by Table 4 and the atomic coordinates represented by Table 5;

b) using said three dimensional structure of said FcεRI protein to design a chemical compound selected from the group consisting of a compound that stimulates binding of FcεRI protein to IgE, a compound that substantially mimics the three dimensional structure of FcεRI protein and a compound that stimulates binding of FcεRI protein with a molecule that stimulates cellular signal transduction through an FcεRI protein;

c) chemically synthesizing said chemical compound; and

d) evaluating the ability of said synthesized chemical compound to enhance IgE-mediated responses.